U.S. DEPARTMENT OF COMMERCE ATTY DKT NO. SERIAL NO. PATENT AND TRADEMARK OFFICE S4100-016 10/764,349 (43307.0020.9)APPLICANT Robert A. Miller, III INFORMATION DISCLOSURE FILING DATE GROUP STATEMENT BY APPLICANT 1/23/04 U.S. PATENT DOCUMENTS **EXAMINER** DOCUMENT DATE SUBCL. NAME CL. FILING DATE INITIAL NO. IF APPROP. w 709,734 9/1902 Bellis В 2,879,654 3/1959 Evans 66 176 \overline{c} 3,806,959 4/1974 Gross 5 334 R D 3,859,824 1/1975 Krylov et al. 66 10 E 3,930,387 1/1976 Imamura 66 190 F 3,986,374 10/1976 Fane 66 190 G 3,986,530 10/1976 Maekawa 139 425 R Η 4,158,292 6/1979 Ehedy et al. 66 190 1 4,199,633 4/1980 Blore 428 91 J 4,244,197 1/1981 Althammer 66 19 4W K 4,278,717 7/1981 Aoyama 428 36 FOREIGN PATENT DOCUMENTS DOCUMENT DATE COUNTRY CL. TRANSLATION SUBCL NO. YES NO IN EP546962 A1 01.12.91 Europe abstract OTHER DOCUMENTS (Incl. Author, Title, Date, Pertinent pages, etc.) **EXAMINER** Jan Noll DATE CONSIDERED

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	Ŋ	4,628,709	12/1986	Aeschbach et al.		66	9 R					
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	P	4,672,825	6/1987	Yasukawa et al.		66	194			·		
	Q	4,729,377	3/1988	Granek et al.		128	639					
·	R	4,753,088	6/1988	Harrison et al.		66	202					
	S	4,771,614	9/1988	Kemp		66	198	$\neg \neg$				
	T	4,787,219	11/1988	Sato et al.		66	190					
<u> </u>	U	4,815,299	3/1989	Bryant		66	202					
	V	4,839,482	6/1989	Ackermann et al.		200	148 E	3				
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- O O	$\frac{1}{Z}$	5,013,089	5/1991	Abu-Isa et al.		297	452					
- 4- -	AA	5,023,430 5,105,067	6/1991	Brekkestran et al.		219	486					
	BB		4/1992	Brekkestran et al.		219	497					
+-	CC	5,147,714	9/1992	Ellison et al.		428	254					
		5,151,319	9/1992	Schoutteten		428	257					
	DD	5,157,379	10/1992	Dennison		340	540					
`	EE	5,229,181	7/1993	Daiber et al.		428	58					
	FF	5,310,590	5/1994	Tochacek et al.		428	102					
	GG	5,364,678	11/1994	Lumb et al.		428	96					
	HH	5,373,713	12/1994	Miller		66	196					
	II	5,382,466	1/1995	Ingham		428	219					
	JJ	5,395,684	3/1995	Robinson et al.		428	253					
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	MM	5,545,470	8/1996	Schuster et al.		428	229			
	NN	5,636,533	6/1997	Hunneke et al.	_	66	196			
	00	5,641,560	6/1997	Schmidt et al.		428	220	_		-
	PP	5,651,847	7/1997	Loeffler		156	71	<u>-</u>		
	QQ	5,735,145	4/1998	Pernick		66	196			
[RR	5,787,503	8/1998	Murphy, III		2	90	-	_	
	SS	5,962,349	10/1999	Mizukami et al.		442	311			
	TT	5,965,223	10/1999	Andrews et al.		428	34.5			
.]	UU	6,006,550	12/1999	Singh		66	13			
	VV	6,057,253	5/2000	Groshens		442	313			
	ww	6,089,051	7/2000	Gorywoda et al.		66	170			
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	BBB	6,145,348	11/2000	Hardegree et al.		66	192				
-+	CCC	6,216,497	4/2001	Miyata et al.		66	202				
	DDD	6,281,150	8/2001	Groshens	· ·	442	314				
	EEE	6,289,702	9/2001	Heirbaut et al.		66	202	- 			
	FFF	6,291,375	9/2001	Allen et al.		442	308				
	GGG	6,341,504	1/2002	Istook		66	172 E	- . -			
	ннн	6,367,290	4/2002	Kolmes et al.		66	172 R				
	III	6,381,482	4/2002	Jayaraman et al.		600	388				
	JJJ	6,397,641	6/2002	Roell		66	170				
OV 1	KKK	6,407,016	6/2002	Van Steenlandt et al.		442	313				
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1	000	US2002/ 0102895 A1	8/2002	Willard		442	244				
	PPP	US2002/ 0134116 A1	9/2002	Sandbach		66	202				
	QQQ	US2002/ 0104355 A1	8/2002	Shirasaki et al.		66	196				
	RRR	US2002/ 0152776 A1	10/2002	Didier Laurent		66	196				
	SSS	US2002/ 0184927 A1	12/2002	Polegato Moretti		66	196				
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